CURRENT VERSION OF THE CLAIMS

The following listing of claims is the current version of the claims in the application:

LISTING OF CLAIMS:

1. (Previously presented): A method of data analysis for determining a base sequence for nucleic acid, based on detected data of electrophoresis of a fragment sample of nucleic acid, comprising steps of:

(A) performing waveform shaping by Fourier transformation on data of a certain number N of points from the head of the detected data using a predetermined peak interval as a parameter;

(B) determining the base sequence as to data of P points (P < N) from the head of the data of N points;

(C) obtaining a subsequent peak interval from the result of the sequence determination in the most recent base sequence determination step;

(D) performing waveform shaping by Fourier transformation on data of N points starting from a position returning by L points (L < M) from a final point of the data ~~most recently~~ subjected to the sequence determination in the most recent base sequence determination step using the subsequent peak interval of the most recent step (C) as a parameter; and

(E) determining the base sequence as to data of M points (M < N) of a central portion among the data of N points subjected to waveform shaping in step (D), so as to be connected with data most recently subjected to the sequence determination, wherein

the steps (E) → (C) → (D) are repeated until all data has been analyzed or no analysis is required despite presence of data, and

(F) determining a base sequence of nucleic acid by connecting sequence-analyzed

portions.

2. (Previously presented): The method of data analysis for determining a base sequence for nucleic acid according to claim 1, wherein

fast Fourier transformation (FFT) treatment is applied to at least one of steps (A) or (D) as the waveform shaping by Fourier transformation.

3. (Previously presented): The method of data analysis for determining a base sequence for nucleic acid according to claim 2, assuming that N is equal to 2^n, M is equal to $2^{(n-1)}$ and L is equal to $2^{(n-2)}$, where n is an integer.